

IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the present application.

Listing of Claims:

Claims 1-12 (Canceled).

Claim 13 (Currently Amended): A method of regeneration of a motor vehicle particle filter, in which ~~means~~ a device configured for regeneration of the filter ~~[[are]]~~ is used as soon as a load value of the filter exceeds a predetermined threshold, comprising:

~~making a calculation~~ calculating ~~[[of]]~~ a parameter representing operating conditions of the ~~means~~ device configured for regeneration; and

controlling operation of the ~~means~~ device configured for regeneration in accordance with a value of the parameter wherein the parameter representing the operating conditions of the device configured for regeneration includes a ratio of a flow of exhaust gases emanating from an engine of the vehicle and a measurement of a mass of soot burned during use of the device for regeneration over a predetermined period of time.

Claim 14 (Currently Amended): A method of regeneration according to Claim 13, ~~wherein~~ which comprises calculating the parameter ~~is calculated~~ continuously while the vehicle is running.

Claim 15 (Currently Amended): A method of regeneration according to Claim 13, ~~wherein the making a~~ which comprises calculating ~~calculation of~~ the parameter ~~is made~~ during use of the ~~means~~ device configured for regeneration.

Claim 16 (Canceled).

Claim 17 (Currently Amended): A method of regeneration according to Claim 13, wherein the parameter representing the operating conditions of the ~~means for~~ device configured for regeneration includes a ratio between instantaneous flow of exhaust gases and a rate of combustion of soot.

Claim 18 (Currently Amended): A method of regeneration according to Claim 13, ~~wherein the~~ which comprises controlling operation of the ~~means~~ device configured for regeneration ~~is controlled~~ by a comparison between the value of the parameter and at least one threshold value stored in memory.

Claim 19 (Previously Presented): A method of regeneration according to Claim 16, ~~wherein~~ which comprises extracting the flow of exhaust gases ~~is extracted~~ from a map stored in a memory in a central computer managing operation of the engine of the vehicle.

Claim 20 (Currently Amended): A method of regeneration according to Claim 19, ~~wherein~~ which comprises extracting the mass of soot burned ~~is extracted~~ from the map stored in the memory in the central computer.

Claim 21 (Currently Amended): A method of regeneration according to Claim 16, ~~wherein~~ which comprises determining the mass of soot burned ~~is determined~~ from the mass of soot previously burned and a rate of regeneration of the filter.

Claim 22 (Currently Amended): A method of regeneration according to Claim 21, ~~wherein which comprises extracting~~ the rate of regeneration of the filter ~~is extracted~~ from a map stored in a memory in a central computer managing operation of the engine of the vehicle, depending on an internal temperature of the particle filter.

Claim 23 (Currently Amended): A method of regeneration according to Claim [[23]] 22, wherein the internal temperature T_{fop} of the particle filter is calculated from equation:

$$T_{fop} = \alpha T_e + (1 - \alpha) \times T_s,$$

in which

T_e designates inlet temperature of the particle filter;

T_s designates outlet temperature of the particle filter; and

α designates a coefficient worked out as a function of the difference between the inlet temperature T_e and the outlet temperature T_s , based on a mapped function in the central computer.

Claim 24 (Currently Amended): A system of control of regeneration of a motor vehicle particle filter, comprising:

~~means~~ a device configured for controlling a load level of the particle filter, ~~to produce use of means and~~ for regeneration of the filter;

~~means~~ a device configured for calculation of a parameter representing operating conditions of the ~~means~~ device configured for regeneration so as to control operation of the ~~means~~ device configured for regeneration as a function of a value of the parameter wherein the parameter representing operating conditions of the device for regeneration comprises a ratio of a flow of exhaust gases emanating from an engine of the vehicle and a measurement

of a mass of soot burned during use of the device configured for regeneration over a predetermined period of time.